ZyXEL ES-4124 V3.80(AIC.1)C0

Release Note/Manual Supplement

Date: Nov. 5, 2007

This document describes the features in the ES-4124 product for its 3.80(AIC.1)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.80(AIC.1)C0 supports models: ZyXEL ES-4124

Version:

ZyNOS Version: V3.80(AIC.1) | 11/05/2007 BootBase Version: V0.8 | 03/13/2007

Default Bootbase Setting:

ZyNOS Version	V3.80(AIC.1) 11/05/2007 21:50:31
Bootbase Version	V0.8 03/13/2007 10:19:25
Vendor Name	ZyXEL Communications Corp.
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	44
RomFile Checksum	7550
ZyNOS Checksum	19ff
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
AA 01 00 00 00 0	0 00 00-00 00 00 00 00 00 00
00 00 00 00 00	0 00 00-00 41 13 00 00 00

Enhanced Features:

None

Bug Fix:

- 1. Enable DVMRP will cause system hang-up.
- 2. Enable DVMRP will cause memory leak.
- 3. WEB for TACACS+ and MSTP can't work
- 4. MAC authentication will cause device unreachable after a period of time.
- 5. Device will not response ARP under large amount ARP traffic.
- 6. Device will crash under TCP SYNC attack.
- 7. Classifier precedence will not follow longest prefix match.

- 8. SNMP management can't cross routing domain
- 9. Set authentication uses RADIUS, after login fail about 256 times, the DUT will pop out RADIUS: identifier error, and after 556 times, the DUT will become unreachable.
- 10. DHCP relay doesn't work in some cases.
- 11. Set an unreachable RADIUS accounting server, accounting event and authentication login uses RADIUS. After a period of time, the DUT can't login and will pop out *radiusLoginSendToAuthServer*: identifier error.
- 12. Large amount of L3 direct broadcast traffic will reduce device performance.
- 13. ARP entries related to trunk ports are not flush when trunk ports link down.
- 14. Unauthenticated SSH attacking will occupy telnet sessions.
- 15. Device will crash under TCP DOS attack.
- 16. The pvid command can not execute.
- 17. Fix the bug that port security feature work with mac authentication.

Known Issue:

- 1. Port movement of IP address is not supported currently.
- A filtering rule with discard source action will always filter packets regardless of source MAC or destination MAC.
- 3. Dvmrp didn't support IGMPv3 source filtering & IGMP Port-based

Limitation of Settings:

1.	VLAN 1Q static entry	1024		
2.	Static MAC forwarding entry	256		
3.	MAC filtering entry	256		
4.	Cluster member	24		
5.	IP routing domain	64		
6.	IGMP Filtering entry	256		
7.	IGMP MVR entry	256		
8.	VRRP entry	14		
9.	OSPF area	4		
10.	Protocol based VLAN entries p	er port 7		
11.	DHCP Server	16		
12.	Syslog server entry	4		
13.	IP souce guard entry	128		
14.	IP subnet based VLAN entry	16		

Change History:

V3.80(AIC.1)C0 (11/05/2007) Fix some critical bugs

V3.80(AIC.0)C0 (04/25/2007) Support enhanced features

V3.70(AIC.0)C0 (09/19/2006) Support enhanced features

V3.60(AIC.0)C0 (07/04/2006) First Public Version

ZyXEL ES-4124 V3.80(AIC.0)C0

Release Note/Manual Supplement

Date: Apr. 25, 2007

This document describes the features in the ES-4124 product for its 3.80(AIC.0)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.80(AIC.0)C0 supports models: ZyXEL ES-4124

Version:

ZyNOS Version: V3.80(AIC.0) | 04/25/2007 BootBase Version: V0.8 | 03/13/2007

Default Bootbase Setting:

ZyNOS Version	V3.80(AIC.0) 04/25/2007 19:43:26
Bootbase Version	V0.8 03/13/2007 10:19:25
Vendor Name	ZyXEL Communications Corp.
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	0019CB000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	44
RomFile Checksum	7550
ZyNOS Checksum	cf8a
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
AA 01 00 00 00 0	0 00 00-00 00 00 00 00 00 00 00
00 00 00 00 00	0 00 00-00 41 13 00 00 00
<u> </u>	

Enhanced Features:

- 1. 802.1s MSTP
- 2. SNMPv3
- 3. enlarge syslog buffer
- 4. 802.3ah OAM
- 5. Multilevel CLI
- 6. SNMP trap group
- 7. configurable multicast VLAN
- 8. independent IGMP snooping and MVR setting
- 9. enlarge concurrent telnet session
- 10. IP source guard(Static binding, DHCP snooping, ARP inspection)
- 11. Two rate three color marking

- 12. IP subnet VLAN
- 13. RADIUS MAC login
- 14. RADIUS accounting
- 15. TACACS+ authentication16. TACACS+ accounting17. IGMPv3

- 18. IGMPv3 snooping
- 19. IGMP port-based
- 20. Loop guard
- 21. Daylight saving

Bug Fix:

- 1. After running DVMRP and stopped for about 30 minutes, the traffic can't come back again.
- 2. The MIB object dot1dTpFdbPort will return incorrect port number when the MAC is static

- When polling with *net-snmp*, it stopped with OID not increasing.
 Can not restore configuration with space in classifier name.
 The CLI command for port-based VLAN *egress port* cannot remove CPU port.
 Switch port cannot link on fixed speed (Auto-negotiation disabled) with crossover cable.

Known Issue:

- 1. Port movement of IP address is not supported currently.
- 2. A filtering rule with discard source action will always filter packets regardless of source MAC or destination MAC.
- 3. Dvmrp didn't support IGMPv3 source filtering & IGMP Port-based

Limitation of Settings:

1.	VLAN 1Q static entry	1024
2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24
5.	IP routing domain	64
6.	IGMP Filtering entry	256
7.	IGMP MVR entry	256
8.	VRRP entry	14
9.	OSPF area	4
10.	Protocol based VLAN entries pe	er port 7
11.	DHCP Server	16
12.	Syslog server entry	4
13.	IP souce guard entry	128
14.	IP subnet based VLAN entry	16

Change History:

V3.80(AIC.0)C0 (04/25/2007) Support enhanced features

V3.70(AIC.0)C0 (09/19/2006) Support enhanced features

V3.60(AIC.0)C0 (07/04/2006) First Public Version

ZyXEL ES-4124 V3.70(AIC.0)C0

Release Note/Manual Supplement

Date: Sept 19, 2006

This document describes the features in the ES-4124 product for its 3.70(AIC.0)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.70(AIC.0)C0 supports models: ZyXEL ES-4124

Version:

ZyNOS Version: V3.70(AIC.0) | | 09/19/2006 BootBase Version: V0.7 | 02/17/2006

Default Bootbase Setting:

ZyNOS Version	V3.70(AIC.0) 09/19/2006 18:34:35
Bootbase Version	V0.7 02/17/2006 11:56:33
Vendor Name	ZyXEL
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	001349000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	03
RomFile Checksum	eb4b
ZyNOS Checksum	2e65
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	C0
Other Feature Bits	
AA 01 00 00 00 00 00 00-00	00 00 00 00 00 00
00 00 00 00 00 00 00 00-00 4	41 13 00 00 00

Enhanced Features:

- 1. MRSTP
- 2. Multicast routing on MVR
- 3. Administration user management
- 4. RADIUS enhancement (for 802.1x enhancement and multiple radius servers)
- 5. IGMP enhancement (timer and priority)
- 6. Web enhancement (Select all and Clone)
- 7. OSPF enhancement (passive interface and interface priority)

Bug Fix:

None

Known Issue:

- 1. Port movement of IP address is not supported currently.
- 2. A filtering rule with discard source action will always filter packets regardless of source MAC or destination MAC.

Limitation of Settings:

VLAN 1Q static entry	1024
Static MAC forwarding entry	256
MAC filtering entry	256
Cluster member	24
IP routing domain	64
IGMP Filtering entry	256
IGMP MVR entry	256
VRRP entry	14
OSPF area	4
Protocol based VLAN entries p	per port 7
DHCP Server	16
Syslog server entry	4
	VLAN 1Q static entry Static MAC forwarding entry MAC filtering entry Cluster member IP routing domain IGMP Filtering entry IGMP MVR entry VRRP entry OSPF area Protocol based VLAN entries p

Change History:

V3.70(AIC.0)C0 (09/19/2006) Support enhanced features

V3.60(AIC.0)C0 (07/04/2006) First Public Version

ZyXEL ES-4124 V3.60(AIC.0)C0 Release Note/Manual Supplement

Date: Jul 04, 2006

This document describes the features in the ES-4124 product for its 3.60(AIC.0)C0 release.

Support Platforms:

ZyXEL ES-4124 V3.60(AIC.0)C0 supports models: ZyXEL ES-4124

Version:

OS Version: V3.60(AIC.0)C0 | 07/04/2006 BootBase Version: V0.7 | 02/17/2006

Default Bootbase Setting:

ZyNOS Version	V3.60(AIC.0) 07/04/2006 18:06:59
Bootbase Version	V0.7 02/17/2006 11:56:33

Vendor Name	ZyXEL Communications Corp.
Product Model	ES-4124
ZyNOS Code Model	ES-4124
HTP Code Model	Unknown
ZyNOS ROM address	50080000
System Type	10
MAC Address	001349000001
Default Country Code	FF
Boot Module Debug Flag	01
RomFile Version	E6
RomFile Checksum	fc40
ZyNOS Checksum	17dd
SNMP MIB level & OID	060102030405060708091011121314151617181920
Main Feature Bits	CO
Other Feature Bits	
AA 01 00 00 00 0	00 00 00 00 00 00 00 00 00
00 00 00 00 00	0 00 00-00 41 13 00 00 00

Features:

- 24 ports Auto MDI/MDI-X 100Mbps and 4 ports Auto MDI/MDI-X 1000Mbps compliant with IEEE802.3u/x/ad
- 2. 2 ports Mini GBIC 1000Mbps compliant with IEEE802.3x/ab
- 3. MAC address learning
- 4. Support IEEE 802.1D transparent bridge
- 5. Support IEEE 802.1Q tagged VLAN
- 6. Support Port-based VLAN
- 7. Support IEEE 802.1X
- 8. Support IEEE 802.1W
- 9. Support IEEE 802.3AD
- 10. Support GVRP
- 11. IGMP snooping
- 12. Support IEEE 802.1p
- 13. Automatic age out
- 14. Specific MAC addresses forwarding per port
- 15. MAC Filtering
- 16. Port Trunking
- 17. Port Mirroring
- 18. Filtering/Mirroring by L2/L3/L4 rules
- 19. Bandwidth control by L2/L3/L4 rules
- 20. Egress traffic shaping per port
- 21. Broadcast Storm Control
- 22. Support Strict Priority and WRR queuing method
- 23. Static IP management or dynamic IP(DHCP client)
- 24. Multiple IP address management
- 25. Firmware upgrade and configuration backup/restore.
- 26. Remote manageable.
- 27. Cluster Management
- 28. WEB manageable
- 29. Support RFC-1213 MIB II
- 30. Support RFC-1493 Bridge MIB
- 31. Support RFC-1643 Ethernet MIB
- 32. Support RFC-1757 Four group of RMON
- 33. Support RFC-2674 VLAN MIB
- 34. NEW CLI supported
- 35. System configuration backup / restore in text-mode
- 36. Multiple login supported
- 37. Radius management authentication

- 38. Hardware Monitor
- 39. External power backup for internal power module failure
- 40. SSH v1/v2
- 41. SSL
- 42. Multicast
- 43. MVR
- 44. IGMP Filtering
- 45. CIR & PIR
- 46. MAC Freeze
- 47. Intrusion Lock
- 48. Support private MIB
- 49. Support Syslog
- 50. Protocol-based VLAN

Known Issue:

- 1. In some circumstances, packets may route to blocking port of the other device when use Spanning Tree Protocol for redundant purpose between two devices. Recommend using Link Aggregation instead.
- 2. Port movement of IP address is not supported currently.
- 3. Discard destination MAC on filter rule, but the same source MAC packet still be filtered.

Limitation of Settings:

1.	VLAN 1Q static entry	1024
2.	Static MAC forwarding entry	256
3.	MAC filtering entry	256
4.	Cluster member	24
5.	IP routing domain	64
6.	IGMP Filtering entry	256
7.	MVR entry	256
8.	VRRP entry	14
9.	OSPF area	4

Bug Fix:

Change History:

V3.60(AIC.0)C0 (07/04/2006) First Public version

Firmware Upgrade:

The ES-4124 uses FTP to upgrade firmware in run-time through its built-in FTP server. You can use any FTP client (for example, ftp.exe in Windows) to upgrade ES-4124. The upgrade procedure is as follows:

Upgrade ES-4124 FW:

```
C:\> ftp <ES-4124 IP address>
User : <Enter>
Password: 1234
230 Logged in
ftp> put 360AIC0C0.bin ras
ftp> bye
```

Where

- User name : just press <Enter>
- \bullet Password : the management password, 1234 by default
- \bullet 360AIC0C0.bin : the name of firmware file you want to upgrade
- •ras : the internal firmware name in ES-4124